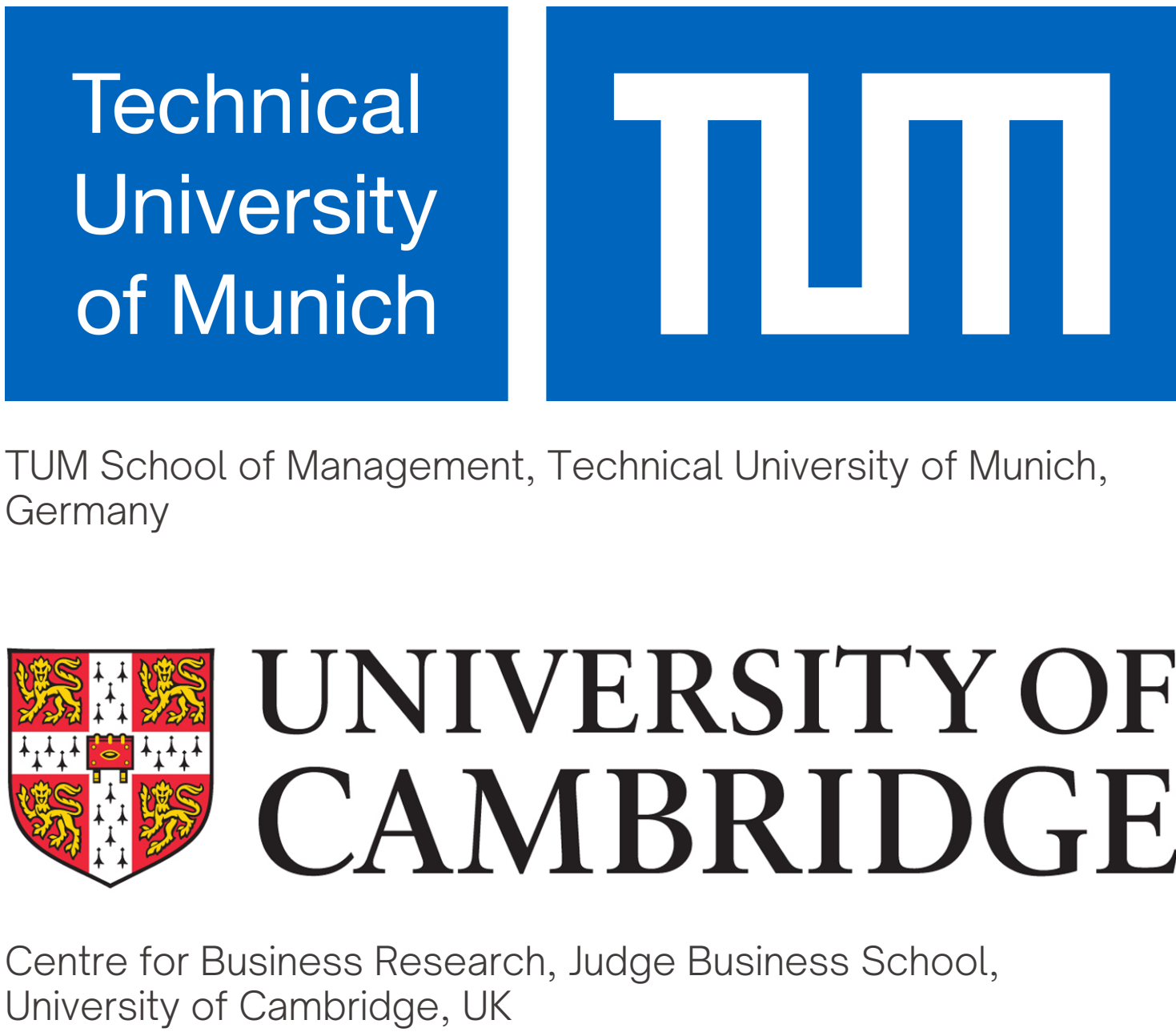


The Private Cost of Legal Uncertainty: Evidence from Europe’s Unified Patent Court



The 2023 launch of the Unitary Patent (UP) and Unified Patent Court (UPC) created a unique policy-induced choice environment: firms could adopt the cheaper new UP system or continue paying the substantially higher costs of national validations. Their revealed preferences allow us to quantify the private cost of early-stage legal uncertainty surrounding the UPC.

1

Introduction

Legal certainty is a cornerstone of economic activity, lowering transaction costs and enabling investment. Yet institutional reforms often generate legal uncertainty, which is difficult to quantify empirically. The introduction of the Unitary Patent (UP) and Unified Patent Court (UPC) in June 2023 represents a major reform of European patent enforcement. While intended

to reduce fragmentation, the UPC’s untested procedures, lack of case law, and transitional complexity generated substantial uncertainty for patentees. Because patentees could freely choose between (i) a UP litigated exclusively at the UPC and (ii) traditional national validations (EP/EP+), their validation choices reveal the private cost of UPC-related uncertainty.

2

Objective

How much were patentees willing to pay to avoid exposure to the new Unified Patent Court?

4

Results

- 1) **Patentees left substantial savings on the table**
Patentees forfeited roughly EUR 160m in avoidable costs during the first six months of the UP system (across all EP and EP+ validations). This implies an average willingness to pay to avoid the UPC per patent of:
 - EUR 10k per EP
 - EUR 7k per EP+
- 2) **Required compensation** to choose the UP (experienced patentees):
We can disentangle the contribution to the cost premium across sources:
 - EUR 4,100 when using fees only
 - falls to EUR 660 when controlling for litigation risk → patentees perceive higher downside risk at UPC relative to national courts
 - falls further to EUR 143 when controlling for licensing → territorial carve-outs are harder under UP. so licensors tend to stay with EP/EP+
- 3) Large **cross-country heterogeneity** in UPC aversion, correlated with quality of national judiciary and trust in EU institutions.

3

Methodology

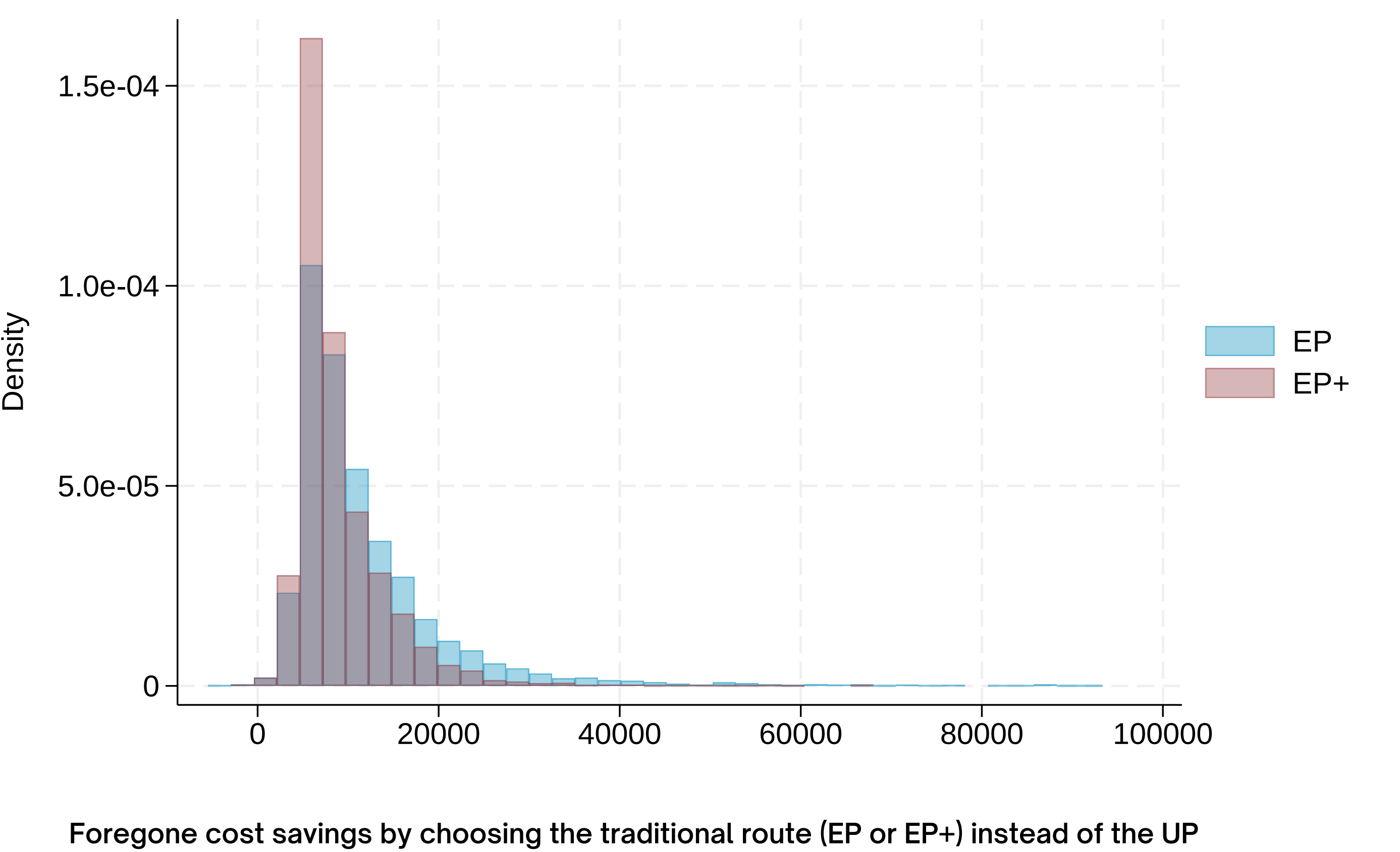
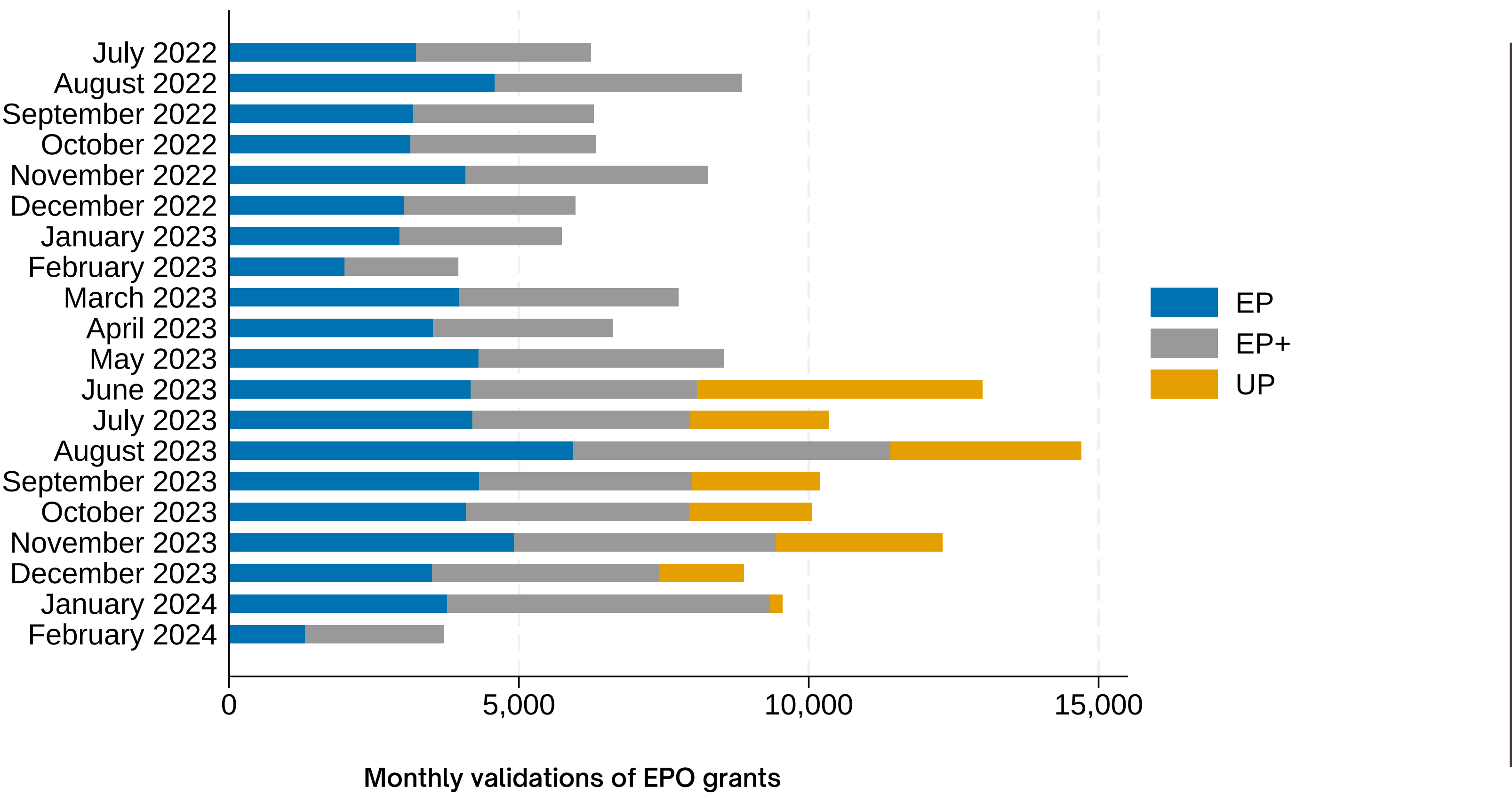
Data
• Patent-level data from EPO PATSTAT (Spring 2024), covering all grants June–Nov 2023, including the observed validation route.
• Historical validation behavior (1998–2023) used to reconstruct each applicant’s typical national coverage and renewal patterns.

Cost counterfactual
For each patent i , compute the cost savings of choosing UP over EP:
$$\Delta \text{Cost}_i = \text{ValCost}_{\text{EP}_i} - \text{ValCost}_{\text{UP}_i}$$
where costs include validation fees, translation costs, attorney fees, and 10-year renewal fees.

Empirical model
A logit model maps the patent-level choice (UP vs EP/EP+) to:

- ΔCost_i (direct monetary incentive);
- litigation-risk proxy ρ_i (technology-based opposition frequency);
- interaction $\rho_i \times \text{Value}_i$ (pre-grant citation counts);
- licensing dummy (patentee has licensed their patents in the recent past);
- applicant- country fixed effects (capturing heterogeneity in residual UPC hesitancy).

Structural interpretation
Coefficients map to litigation-cost differences, perceived outcome differences, licensing advantages, and a residual “legal uncertainty” parameter κ .



5

Conclusion

- Patentees paid **substantial premiums** to avoid the UPC during its first months.
- Litigation risk and expected cost as well as licensing structure play major roles.
 - A residual “hesitancy premium” remains and is economically meaningful.
- I expect the premium to shrink over time as UPC jurisprudence stabilizes – to be seen!

- Caveats:
- UPC case law did not yet exist; effects capture *ex ante* uncertainty.
 - Validation-cost estimates rely on an applicant’s representative past patenting.
 - Some heterogeneity across applicants and technologies remains unexplained.
 - Historical validation behavior may not reflect future equilibrium under the UP system.

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